CLAIMS

What is claimed is:

1. A message router system for a server system that communicates with embedded devices over a data network, the router system comprising:

a router that transfers messages to the embedded devices on the data network when the embedded devices are accepting messages; and

a message store that temporarily stores messages addressed to embedded devices until the embedded devices can accept messages.

2. A message router system as recited in Claim 1, further comprising a system manager that tracks states of embedded devices on the data network and whether the embedded devices are able to receive messages.

3. A message router system as recited in Claim 2, further comprising a queue manager for facilitating the transfer of messages between the message router and a process.

4. A message router system as recited in Claim 1, wherein the router retrieves messages from the message store when a system manager indicates that an embedded device to which the messages are addressed is able to accept the messages.

5. A message router system as recited in Claim 1, further comprising a bulk data transfer manager for transferring larger data files between the server system and the embedded devices.

6. A message router system as recited in Claim 5, wherein larger data files are transferred to the embedded devices by the router sending the embedded devices a message to download a file and a location of the file, the embedded devices contacting the bulk data transfer manager to obtain the file.

7. A message router system as recited in Claim 6, wherein the embedded devices directly contact the bulk data transfer manager to obtain the file without sending a message via the router.

8. A method for routing messages from a server system to embedded devices over a data network, the method comprising:

transferring messages to the embedded devices over the data network when the embedded devices are accepting messages; and

storing messages addressed to embedded devices until the embedded devices can accept the messages.

9. A method as recited in Claim 8, further comprising tracking states of embedded devices on the data network and whether the embedded devices are able to receive messages.

10. A method as recited in Claim 9, further comprising queuing messages that are received from a server system prior to being transferred to the embedded devices.

11. A method as recited in Claim 8, further comprising:

detecting whether a previously unavailable embedded device is available to receive messages; and

retrieving stored messages for the embedded device and transferring the messages to the embedded device.

12. A method as recited in Claim 8, further comprising transferring larger data files from the server system to the embedded devices.

13. A method as recited in Claim 12, wherein the step of transferring the larger data file comprises:

sending the embedded devices a message to download a file and a location of the file; and

the embedded devices contacting a bulk data transfer manager to obtain the file.

14. A method as recited in Claim 13, further comprising the embedded devices directly contacting the bulk data transfer manager to obtain the file.

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